

Amendment B
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REMARKS/ARGUMENTS

Responsive to the Office Action mailed June 17, 2005, Applicants provide the following. Claims 9, 13, 15, 17, 21, 23, and 26 have been amended. Twenty-one (21) claims remain pending in the application: Claims 9 through 29.

Allowable Subject Matter

At the outset, Applicants note with appreciation the Examiner's indication that claims 10 through 18 are allowed.

Turning to the specific rejections:

Claim Rejections - 35 U.S.C. § 102

Claims 9, 11-17, and 19-29 are rejected under 35 U.S.C. § 102(e) as being anticipated by Sprouse et al. (U.S. Patent App. Pub. No. 2003/0192319). This rejection is respectfully traversed and reconsideration is requested.

As set forth at M.P.E.P. § 2131, a claim is anticipated only if every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.

Sprouse et al. discloses a compressor system having channels 50 through which air travels and becomes "hot." The hot air then flows from the channels 50 into a premix chamber 42 where fuel injected from an injector 40 becomes entrained with the hot air. The fuel/air mixture is then directed into heat exchange tubes 48 where fuel in the air combusts as it engages a catalyst disposed on inside walls of the heat exchange tubes 48. As the fuel combusts, the temperature of the air in the heat exchange tubes 48 is increased to a hypersonic temperature

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(i.e., a temperature at which fuel automatically ignites, without the need for a catalyst or other ignition source). Thus, Sprouse et al. discloses a combustor system wherein the temperature of air within each air passage 50 is the same when fuel is ignited ensuring that all of the fuel provided by the injector port 40 reaches the hypergolic temperature at substantially the same time.

Sprouse et al., however, does not disclose, either expressly or inherently each and every element as presented in claims 9, 17, and 23, as now amended. For example, Sprouse fails to disclose at least "a means for heating in thermal contact with at least one first air passage, wherein said means for heating warms air within the at least one first air passage to a predetermined temperature sufficient to initiate catalytic combustion within at least one premixed fuel/air passage; and wherein the premixed fuel/air passages are in thermal contact with the air passages such that air within at least one second air passage is warmed to said predetermined temperature by said premixed fuel/air passages," as presently recited in claim 9.

Moreover, Sprouse et al. fails to disclose at least "blowing air through a plurality of air passages, said blown air having a first temperature; providing fuel to a plurality of fuel/air passages; redirecting said blown air into at least one premixed fuel/air passage; within less than an entirety of the plurality of air passages, heating said blown air to a second temperature sufficient to initiate catalytic combustion of said fuel and a catalyst within the at least one premixed fuel/air passage with the redirected air; transferring heat generated by the catalytic combustion to at least one air passage through which air is blown at the first temperature to heat said blown air to said second temperature," as presently recited in claim

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17.

Finally, Sprouse et al. fails to disclose at least "a plurality of tubes forming at least one first air passage, at least one second air passage, and a plurality of premixed fuel/air passages adjacent to the plurality of air passages; a means for heating in thermal contact with at least one first air passage, wherein said means for heating warms air within at least one first air passage to a predetermined temperature sufficient to initiate catalytic combustion within at least one premixed fuel/air passage, wherein the premixed fuel/air passages are in thermal contact with the air passages such that air within at least one second air passage is warmed to said predetermined temperature," as presently recited in claim 23.

For at least the reasons presented above, Applicants respectfully submit that Sprouse et al. does not anticipate claims 9, 17, and 23, as presently amended. Thus, the present rejection of claims 9, 17, and 23 and their various dependent claims is overcome and should be withdrawn.

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CONCLUSION

By way of this amendment, Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain any outstanding issues that require adverse action, it is respectfully requested that the Examiner telephone Thomas Lebens at (805)781-2865 so that such issues may be resolved as expeditiously as possible.

The Commissioner is hereby authorized to charge any additional fees which may be required by Applicants to Deposit Account No. 06-1135.

Respectfully submitted,

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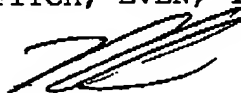
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